PRELIMINARY REGULATORY EVALUATION, INITIAL REGULATORY FLEXIBILITY DETERMINATION, TRADE IMPACT ASSESSMENT, AND UNFUNDED MANDATES ASSESSMENT

for the

REGULATION OF FRACTIONAL AIRCRAFT OWNERSHIP PROGRAMS NOTICE OF PROPOSED RULEMAKING (14 CFR Parts 13, 61, 91, 119, 125, 135, and 142)

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EXECUTIVE SUMMARY

This report presents an economic evaluation of the effects of proposed amendments to parts 13, 61, 91, 119, 125, 135, and 142 of Title 14, Code of Federal Regulations addressing fractional ownership programs. Fractional ownership is a term referring to aircraft operations where multiple parties buy shares in one or more business aircraft and enter into contract arrangements with a common management company to provide aircraft management services necessary to meet the requirements of proposed part 91, subpart K. The evaluation focuses on the direct costs that would be incurred by fractional aircraft ownership program operations to comply with the proposed regulatory requirements, including the costs passed on to the fractional owners in a fractional aircraft ownership program, and the costs borne by the Federal Aviation Administration (FAA) to administer the regulation. It concludes that the rule is necessary to maintain the level of safety of these operations. Cost savings and revenue-increasing business opportunities that may be realized by fractional aircraft ownership programs and on-demand air charter operations as a result of the proposed revisions also are addressed.

The proposed rule is expected to impose a total estimated cost of approximately $22.6 million (undiscounted) in 1999 dollars on fractional operations and the FAA over the 15-year period from 2002 to 2016. Fractional aircraft ownership operations are expected to incur approximately 91 percent of these total costs, or $20.5 million (undiscounted), complying with the regulatory requirements. Only eligible fractional aircraft ownership program managers and the fractional aircraft owners (fractional aircraft ownership entities) who would be subject to the proposed part 91, subpart K requirements would incur compliance costs. The FAA is expected to incur the remaining 9 percent of the total estimated cost, or approximately $2.1 million (undiscounted), administering the rule.

The proposed rule is estimated to generate cost savings to fractional aircraft ownership program operations of $413 million (fractional ownership entities operating under part 91, subpart K would realize $116.3 million; part 119 certificate holders operating

under part 135 would realize $296.7 million). The proposed rule also is expected to generate potential additions to revenue of $1.7 million (only for certificate holders operating under part 135).

The proposed rule would not have a significant impact on a substantial number of small entities currently engaged in fractional aircraft ownership operations.

The proposed rule would not affect trade opportunities for U.S. firms doing business abroad or for foreign firms doing business in the United States.

The proposed rule would not impose any cost on government units covered by requirements under the Unfunded Mandates Act of 1995.

1.0 INTRODUCTION

1.1 Regulatory Background

The Federal Aviation Administration (FAA) proposes to develop new regulations for fractional aircraft ownership programs. The proposed rule, if adopted, would create a new subpart K within part 91 of Title 14, Code of Federal Regulations (14 CFR) and make significant changes to 14 CFR part 135. The proposed rule would establish new requirements and revisions in a variety of areas, including crew training, pilot qualifications, pilot rest, flight time and duty limits, landing distance performance, operating limitations, program operating manuals, and administrative requirements. The codification of rules under part 91, subpart K is in response to a significant increase in the number of fractional ownership operations and some concerns pertaining to who has responsibility for operational control during fractional ownership operations. The proposed requirements are based primarily on corporate aviation "best practices." Many of these practices, while not currently mandated by part 91 regulations, are used by most fractional aircraft ownership program operators.

In October 1999, the FAA convened the Fractional Ownership Aviation Rulemaking Committee (FOARC) to address the issues surrounding the regulation of fractional aircraft ownership program operations. The committee's objective was to revise 14 CFR and to provide any associated guidance material as may be appropriate with respect to fractional aircraft ownership programs. FOARC members in attendance included on-demand charter operators, program managers and owners, aircraft manufacturers, corporate flight departments, traditional aircraft management companies, aircraft financing and insurance companies, and industry trade associations. Representatives of the FAA, the U.S. Department of Transportation, and foreign civil aviation authorities also were in attendance. On February 23, 2000, after meetings in November and December 1999, and a review of all comments received from the public and operators, the FOARC presented rulemaking recommendations to the FAA that formed the basis of the Notice of Proposed Rulemaking (NPRM) entitled "Regulation of Fractional Aircraft Ownership Programs."

1.2 Problem Statement

The proposed rule would establish fractional aircraft ownership operational standards to foster and preserve an acceptable level of safety. The proposed rule would impose costs on fractional aircraft ownership program entities and fractional owners operating under proposed part 91, subpart K that require identification and analysis.

1.3 Scope and Limits

This regulatory evaluation identifies the expected economic impacts of proposed regulations for fractional aircraft ownership program operations. Where possible, the magnitude of these impacts is estimated.[1] The evaluation concentrates on the principal regulatory requirements and addresses the direct costs and benefits attributable to the rule that will be incurred by fractional aircraft ownership program participants, the FAA, and the general public. Also included in this report are preliminary determinations of the impacts the proposed rule would have on (1) small entities, (2) international trade, and (3) State, local, and tribal governments.

The estimated compliance costs, cost savings, and potential revenue opportunities attributable to the proposed rule are principally based on information provided by fractional aircraft ownership program experts listed in Table A–1 in the appendix to this report. Hence, this regulatory evaluation is limited by the accuracy of data provided by fractional aircraft ownership program entities. Information supporting the quantitative evaluation of costs and benefits is contained in the appendix. While the FAA believes there are numerous non-fractional aircraft ownership programs operating under part 135 that may be affected by the proposed regulatory requirements, there is insufficient information to estimate the economic impact on these commercial on-demand air carriers. Accordingly, the FAA solicits information to address this matter and invites comments on the validity of all data, assumptions, and assertions, and any related potential impacts.

[1] The principal requirements evaluated are the amendments and additions to the Regulation of Fractional Aircraft Ownership Programs, 14 CFR parts 61, 91, and 135. The amendments to 14 CFR parts 13, 119, 125, and 142 do not impose costs on the FAA or fractional aircraft ownership program operations or impact public health and safety, or the safety of property.

2.0 FRACTIONAL AIRCRAFT OWNERSHIP PROGRAM PROFILE

2.1 Market Overview

2.1.1 Fractional Aircraft Ownership Operations

In 1986, Executive Jet Aviation, Inc., created a new program that offered increased flexibility in the ownership and operation of aircraft by individuals and corporations. Under fractional aircraft ownership, several parties buy shares of a business aircraft. This allows individuals to obtain use of a sophisticated aircraft with state-of-the-art equipment at a fraction of the acquisition cost. This program used existing aircraft acquisition concepts, including shared aircraft ownership, and provided for the management of the aircraft by an aircraft management company. The aircraft owners participating in the program agreed not only to share their aircraft with others having an ownership interest in that aircraft, but also to dry lease their aircraft to other owners in the program. The aircraft owners use a single management company to maintain the aircraft and to administer the leasing of the aircraft among the owners.

Since the inception of fractional aircraft ownership programs, the number of companies offering fractional aircraft ownership has increased substantially. Currently, there are eight widely recognized fractional aircraft ownership program entities. These are listed in Table 2–1. As of early 2000, the leading fractional aircraft ownership programs managed approximately 465 aircraft on behalf of 3,446 shareholders. Turbojet airplanes and turbopropeller-powered airplanes comprise the vast majority of the current fractional aircraft ownership program fleet. Currently, there are only two fractional helicopter ownership programs with a total of three helicopters conducting operations. Growth in all fractional aircraft ownership programs is expected to continue.

TABLE 2–1. Current Fractional Aircraft Ownership Program Entities

Commercial Organization Name	Type of Operation[a]	Estimated Number of				
		Shareholders	Aircraft	Personnel		
				Pilots[b]	Other	Total[c]
Executive Jet Aviation (Netjets)	Private and On-demand	1,848	216	972	670	1,642
Bombardier Business Jet Solutions (Flexjet)	Private	675	89	401	275	676
Raytheon Travel Air	Private	509	79	356	244	600
Flight Options	Private	363	62	279	192	471
CitationShares	Private and On-demand	20	6	27	19	46
Alpha Flying, Inc. (PlaneSense)	Private	19	5	23	15	38
Air Travel Partners	Private	0	4	18	12	30
Jet Linx Aviation	Private	12	4	18	12	30
Total	8 Entities	3,446	465	2,094	1,439	3,533

Source: Fractional aircraft ownership program experts listed in Table A–1 in the appendix.
[a] Passengers are either transported aboard aircraft for which they bear no operational responsibility, such as on-demand charters, or are transported aboard aircraft they own or lease and for which they bear full operational responsibility, such as corporate-owned jets. Private fractional aircraft ownership operations are required to comply with part 91, including subpart K of the proposed rule, and on-demand air carrier operations are required to comply with part 135.
[b] Estimated by Phaneuf Associates Incorporated using information provided by the National Business Aviation Association and calculated as follows: number of aircraft x 4.5 = number of pilots.
[c] Estimated by Phaneuf Associates Incorporated; includes all personnel associated with operations, such as pilots, flight attendants, mechanics, management, and office staff, calculated as follows: number of aircraft x 7.6 = total number of personnel.

2.1.2 On-Demand and Private Operations

Commercial air carrier passengers exercise no control over and bear no responsibility for the airworthiness or operation of the aircraft aboard which they are flown. Accordingly, the FAA has determined that an appropriate level of public safety is provided by imposing stringent regulations and oversight under part 135 for on-demand air carrier operations. Many fractional aircraft ownership program entities provide on-demand air carrier service and accordingly hold operating certificates under 14 CFR part 119 authorizing them to conduct operations under part 135. Fractional aircraft ownership program entities operating under part 91 often provide service similar to on-demand operations, although they are exempt from the relatively more stringent requirements imposed upon entities operating under part 135. Furthermore, fractional

aircraft ownership program entities operating under part 91, subpart K maintain not-for-hire aircraft primarily used by private businesses.

The FOARC evaluated current best practices of fractional aircraft ownership programs and parallel provisions of 14 CFR parts 119, 121, and 135 in developing proposed part 91, subpart K. Based on this evaluation, FOARC concluded that certain provisions of proposed subpart K would provide a level of safety equivalent to the parallel provisions of part 135. The FOARC also concluded that certain changes to part 135 would be appropriate. Accordingly, the FOARC proposed corresponding amendments to the pertinent sections of part 135 provided program entities meet certain eligibility requirements.

2.2 Fractional Aircraft Ownership Program Operations Projections

Over the 15-year period from 2002 to 2016, the FAA estimates that fractional aircraft ownership program entities, including associated operating personnel and equipment, will continue to increase consistent with the demand for convenient, less costly, easily accessible aircraft for business and personal use. This growth is quantified and presented in Table 2–2.

TABLE 2–2. Distribution of Expected Number of Fractional Aircraft Ownership Program Operating Entities, Shareholders, Aircraft, Pilots, and Over-Water Trips Between Entities Conducting Operations Under Part 91, Subpart K and Part 135

Year	Number of								
	Entities		Shareholders	Aircraft		Pilots		Over-Water Trips	
	Part 91	Part 135		Part 91	Part 135	Part 91	Part 135	Part 91	Part 135
2002	6	2	3,446	308	205	1,386	923	350	3,000
2003	6	2	3,614	323	215	1,454	968	367	3,146
2004	7	2	3,793	339	226	1,526	1,017	385	3,307
2005	7	2	3,983	356	237	1,602	1,067	405	3,468
2006	7	2	4,184	374	249	1,683	1,121	425	3,644
2007	8	3	4,397	393	261	1,769	1,175	447	3,820
2008	8	3	4,621	413	274	1,859	1,233	469	4,010
2009	8	3	4,856	434	288	1,953	1,296	493	4,215
2010	9	3	5,102	456	302	2,052	1,359	518	4,420
2011	9	3	5,359	479	317	2,156	1,427	544	4,639
2012	10	3	5,628	503	333	2,264	1,499	572	4,873
2013	10	3	5,907	528	350	2,376	1,575	600	5,122
2014	11	4	6,198	554	368	2,493	1,656	630	5,385
2015	11	4	6,512	582	386	2,619	1,737	661	5,649
2016	12	4	6,836	611	405	2,750	1,823	694	5,927

Source: Developed by Phaneuf Associates Incorporated based on information provided by fractional aircraft ownership program experts listed in Table A–1 in the appendix. While the data presented in this table are based on the eight principal fractional aircraft ownership entities identified in Table 2–1, the FAA believes that there are other, albeit smaller, entities in existence whose number cannot be determined at the present time. Accordingly, information is sought to resolve this matter.

3.0 REQUIREMENTS OF THE PROPOSED RULE

This section presents a discussion of the principal requirements of the proposed rule. Each section of the proposed rule is addressed in terms of its effects on fractional aircraft ownership programs.

Section 13.19 would be amended to include administrative procedures concerning the suspension or revocation of the program manager's management specifications. Such suspensions or revocations of management specifications would be handled like analogous certificate actions, including the right to appeal any suspension or revocation to the National Transportation Safety Board. This would require a statutory amendment.

Section 61.57 would be amended to clarify the existing alternative means of compliance with the pilot night currency requirement and would allow a second alternative.

Section 91.501 would make several substantive changes to existing subpart F. Subpart F currently only applies to large airplanes and multiengine turbine-powered airplanes. It would be amended to include all aircraft used in a fractional ownership program regardless of the number of engines, size, or type, without the need to be granted an exemption to operate a small airplane under subpart F. In addition, proposed § 91.501(b)(10) would permit fractional owners who meet the applicability provisions of § 91.501(a) and who compensate fractional ownership program managers for the provision of fractional ownership program management services to conduct flights under part 91, subpart K in a fractional ownership program aircraft. Also § 91.501(b)(10) would permit fractional ownership program managers to conduct any operation identified in current paragraphs (b)(1) through (b)(9).

Sections 91.509 and 135.167 would be amended to allow pressurized turbine-powered aircraft that are expected to be operated above 25,000 feet to operate without a life raft. These proposed amendments would also clarify the existing "30 minutes or 100 nautical miles" standard (50 nautical miles for part 135 aircraft) to mean that the greater measurement is applicable.

Sections 91.1001 through 91.1007 would define fractional ownership programs, program managers, and fractional owners. Section 91.1001(b)(1) would list five requirements for a fractional ownership program, which, when present, distinguish fractional programs from other multiple ownership arrangements. It would set minimum fractional ownership interest requirements of 1/16 for fixed wing, subsonic or powered-lift program aircraft, and 1/32 for rotorcraft programs. Section 91.1001(b)(6) would define fractional ownership program aircraft to include aircraft in which a fractional owner has a minimum fractional ownership interest and which has been included in the dry lease aircraft exchange pursuant to the program agreements; and aircraft in a program managed by an affiliate of the program manager. Section 91.1001(b)(9) would create a presumption that an affiliate is a company that has both a 40 percent equity interest and 40 percent of the voting power. In addition, affiliate companies permit owners in each related program to use the aircraft in the other program or programs. Section 91.1003 would specify the terms of the mandatory contract between fractional owners and the program manager. Section 91.1005 would prohibit fractional aircraft owners from receiving any compensation other than that permitted under § 91.321 or § 91.501 for the operation of their aircraft. It also would make clear that the total hours associated with the fractional owner's share of ownership and flown by the fractional owner are limited to the share(s) purchased. Section 91.1007 would require that a fractional owner be notified in advance, when possible, if a charter aircraft will be substituted for a program aircraft.

Sections 91.1009 through 91.1013 would define and clarify issues relating to operational control. The FAA traditionally has focused on which entity is responsible for flight safety decisions when determining who has operational control. Section 91.1009 would clarify current law and policy. It would provide that the fractional owner is in operational control when a program aircraft is carrying the passengers or property that the owner directed be carried on the aircraft, and the owner has the appropriate rights and is subject to the limitations set forth in the preceding sections. Section 91.1011 would specify the compliance implications of fractional owners being in operational control. It would acknowledge that the owner may delegate some or all of the tasks associated with such compliance to the program manager but would specify that the owner remains responsible for compliance. Section 91.1013 would require the program manager to brief

each fractional owner on the owner's operational control responsibilities and require the owner to sign a detailed acknowledgement of those responsibilities.

Sections 91.1014 through 91.1035, 91.1047, and 91.1109 through 91.1115 would address the responsibilities of the program manager, establish a requirement for a program manager to hold management specifications issued by the FAA, establish a process for the Administrator and the program manager to amend management specifications, and incorporate many existing industry practices regarding such issues as program operating manuals, recordkeeping, flight scheduling and locating, operating information, and passenger awareness procedures. Section 91.1019 would establish requirements for program managers that facilitate the conduct of FAA tests and inspections. Sections 91.1027 would authorize program managers that also hold part 119 air carrier or operating certificates and operations specifications authorizing them to conduct operations under part 121 or part 135 to use records required by those parts to satisfy the recordkeeping requirements of proposed §§ 91.1027 and 91.1113. Section 135.21 would add a requirement for the operator to carry appropriate parts of the manual on each aircraft when away from the principal operations base, except for the approved inspection program manual if that manual is located at specified stations and the aircraft is operated en route to those stations.

Sections 91.1025 and 91.1037 would address program operating manual content, including a provision to allow the use of reduced runway operating lengths under § 91.1037, and establish performance operating limitations for planning purposes for operations into destination and alternate airports conducted by large turbine engine-powered transport category airplanes. Section 135.23 would establish a provision in the manual for an approved Destination Airport Analysis. From this analysis, an eligible on-demand operator could develop procedures to operate into destination and alternate airports using runway safety margins less than that currently prescribed in §§ 135.385 and 135.387. Section 135.225(a) would provide a pilot employed by an eligible on-demand operator an alternative means of compliance with the current destination airport weather reporting facility requirement. This alternative would require the destination airport to have approved weather reporting or, if weather reporting is not

available at the destination airport, an alternate airport to be selected that does have weather reporting. Both the destination and the alternate airport must have a current local altimeter setting or a current alternate altimeter setting provided by the facility designated on the approach chart for that airport. Sections 135.385 and 135.387 would increase the planned full stop landing distance for destination and alternate airports from 60 percent to 85 percent of the effective runway length for both the destination and alternate airports. In addition, the proposed amendments would allow the 85 percent planned stopping distance requirement to be exceeded at the destination airport if the program manager's destination airport analysis procedure in its operating manual shows that the airplane would be able to stop within the runway distance available at the destination airport. Finally, whenever the planned stopping distance at the destination airport exceeds 85 percent, the operator would be required to select an acceptable alternate airport and to plan the flight to operate to that alternate airport if the conditions at the destination airport upon arrival do not allow the airplane to be brought to a stop within the available length of the runway at that airport. These sections would permit the current best practices of fractional program managers in these circumstances to continue.

Section 91.1039 would set forth instrument flight rules (IFR) takeoff, approach, and landing minimums for program flights. It would include specifications regarding weather reports, altimeter setting, and ceiling and visibility minimums. It would allow a pilot on a program aircraft operating a program flight to begin an instrument approach procedure at the destination airport if the destination airport has approved weather reporting or, if weather reporting is not available at the destination airport, require the pilot to select an alternate airport that does have weather reporting. Both the destination and the alternate airport would be required to have a current local altimeter setting or a current alternate altimeter setting provided by the facility designated on the approach chart for that airport.

Sections 91.1041 and 135.145 would require proving tests both for fractional ownership program aircraft and for part 135 aircraft only before the initial use of either an aircraft for which two pilots are required under the aircraft type certification requirements or a turbojet-powered airplane.

Section 91.1045 would require program aircraft to be equipped with safety equipment, such as cockpit voice recorders and airborne weather radar, to the extent such equipment would be required on that aircraft if it were operating under part 121 or part 135. This conforms to existing best practices of fractional programs.

Section 91.1047 would require the implementation of drug and alcohol misuse education programs for flightcrews, instructors, and maintenance personnel directly employed by the program manager but would not impose a federally mandated testing program. Managers would be required to disclose to owners and prospective owners the scope of the program manager's company drug and alcohol testing program, if any, and to compare it with the federally mandated programs required of air carriers. This section and amended §§ 135.251 and 135.255 would provide an exception to allow emergency maintenance to be performed under defined circumstances and would require written notification to the FAA within 10 days after the event. The exception permitted by §§ 135.251 and 135.255 would apply to on-demand charter flights only.

Sections 91.1049 through 91.1107 would contain numerous requirements relating to crewmember training, testing, and qualifications as well flight time and duty time limits and rest requirements. These proposed requirements are based on previously developed industry guidelines and best practices. Section 91.1049 would require at least three pilots per program aircraft and require at least two qualified pilots on each flight with passengers on board unless otherwise authorized by the Administrator. Section 91.1051 would require the program manager to conduct an extensive background check on pilots within 90 days of hire. Section 91.1053 would (1) require pilots used in fractional ownership operations to meet the applicable requirements of 14 CFR part 61, (2) set minimum flight hours for pilots and second-in-command pilots, and (3) require pilots in command of multiengine, turbine-powered, fixed-wing aircraft and powered-lift aircraft to hold an airline transport certificate and second-in-command pilots to hold a commercial pilot certificate with an instrument rating. Additionally, for all other aircraft, the pilot in command would be required to hold only a commercial pilot certificate with an instrument rating.

Section 91.1055 would set forth limitations on second-in-command takeoffs and

landings under a variety of conditions. In addition, it would set minimum experience requirements for the pairing of pilots. Sections 91.1057 through 91.1061 would establish flight, duty, and rest time requirements for pilots flying fractional ownership program aircraft on program flights. The FORAC believes these provisions would provide a degree of rest equivalent to or greater than that currently provided to air carriers (although the FAA is considering revising these regulations at this time).

Section 91.1063 would set forth the applicability and define the terms used in §§ 91.065 through 91.1107 regarding the testing and training of pilots, check pilots, instructors, and flight attendants. If authorized by the FAA, the program manager may use the applicable training and testing requirements of part 121, subparts N and O (which would be changed to Subpart Y if another NPRM is adopted) instead of §§ 91.1065 through 91.1107, except for the operating experience requirements of § 121.434.

Section 91.1065 would set forth the pilot testing requirements and require a competency check that may be given in an aircraft simulator if approved by the Administrator.

Section 91.1067 would prescribe the initial and recurrent testing requirements for flight attendants. Section 91.1069 would require pilots to pass an instrument proficiency check every 6 months and second-in-command pilots to pass a check every 12 months. It also would set forth the areas to be checked and the proficiency levels to be demonstrated.

Section 91.1071 would provide a grace period for conducting the tests and checks, permit additional training during the course of the check, and prohibit the program manager from using a pilot who has been unable to demonstrate satisfactory performance.

Section 91.1073 would require each program manager to have an approved training program and to provide a training program that ensures each crewmember, including each flight attendant (if the program manager uses a flight attendant crew member), flight instructor, check pilot, and each person assigned duties for the carriage and handling of hazardous materials is adequately trained to perform these assigned duties. Section 91.1075 would permit a program manager to use the services of a 14 CFR part 142-certified training center. Section 91.1077 would outline the training program approval process, while §§ 91.1079 and 91.1081 would set forth curriculum and crewmember training requirements.

Sections 91.1083 and 91.1085 would cover emergency and hazardous materials

recognition training, and § 91.1087 would address the use of simulators and other training devices. Sections 91.1089 and 91.1091 would set forth the necessary qualifications of check pilots and flight instructors, while §§ 91.1093 and 91.1095 would prescribe the initial and transition training and checking of these positions. Sections 91.1097 through 91.1107 would address the initial, transition, upgrade, requalification, differences, and recurrent training of crewmembers and flight attendants.

Sections 91.1109 through 91.1113 would set forth the aircraft inspection program, maintenance training, and recordkeeping requirements. The inspection program would be required to be derived from the inspection program portion of one of the following programs: (1) a manufacturer's program, (2) a continuous airworthiness maintenance program currently in use under § 121.373 or § 135.419 by a person holding an air carrier or operating certificate and operating the make and model aircraft under part 121 or part 135, or (3) an approved program currently in use by a person holding a certificate to operate under § 125.247 or § 135.419.

Section 119.1 would be amended to make it clear that this part is not applicable to flights conducted under subpart K in a fractional ownership program aircraft operated by a fractional owner.

The proposed amendment to § 125.1 would make it clear that the aircraft operations conducted by both the fractional owners and program managers would be excepted from the requirements of part 125.

Section 135.1 would be amended to define eligible on-demand operators.

Minor corrections would be made in §§ 135.21, 135.291, and 135.324 to change the term "provide" to "conduct," in reference to training by part 142 training centers.

Section 135.247 would permit on-demand part 135 pilots to use the alternatives in § 61.57 to maintain their night take off and landing recent experience requirements.

Section 142.1 would be amended to include part 91 fractional ownership programs.

4.0 IMPACT OF REVISIONS TO FRACTIONAL AIRCRAFT OWNERSHIP PROGRAM REGULATIONS

4.1 Overview of Analytical Approach

This section compares operations under the proposed rule with current practice, commonly referred to as the baseline. The baseline case used for this analysis views the proposed rule as a new requirement imposed on the emerging fractional aircraft ownership segment of general aviation by the FAA. Certain standard operating procedures or best business practices of fractional aircraft ownership operations represent "voluntary compliance" with the regulation and, therefore, are captured within the baseline. Similarly, certain personnel already among the FAA workforce available to perform the monitoring and surveillance activities associated with administering the proposed rule are captured within the baseline.

Incremental impact analysis, within the context of this study, focuses on determining the difference between all relevant FAA and fractional aircraft ownership operations actions under the baseline and those under the proposed rule. The incremental effects of the proposed rule are identified and measured relative to common fractional aircraft ownership practice (that is, the baseline case). Accordingly, if the proposed rule creates a situation that departs from this baseline, then there may be a compliance cost (or cost savings) to fractional aircraft ownership operations, a cost to the FAA to administer the regulatory requirements, and an increase in public safety.

The estimated compliance costs, cost savings, and potential revenue opportunities attributable to the proposed rule are principally based on information provided by fractional aircraft ownership program experts listed in Table A–1 in the appendix. The FAA invites comments on the validity of all data, assumptions, and assertions, and any potential impacts related thereto.

4.2 Impacts of the Proposed Rule on Fractional Aircraft Ownership Program Operating Entities

Fifty-four principal sections of the proposed rule contain requirements that collectively are expected to create incremental costs, cost savings, or revenue opportunities for fractional aircraft ownership program operations. These sections and their respective

impacts are summarized in Table 4–1 below. Not all proposed revisions affect all segments of fractional aircraft ownership program operations, as on-demand and private use operations would be impacted differently. This is shown in Table 4–2.
A section-by-section discussion of the incremental impacts on fractional aircraft ownership programs is presented below and summarized in Table 4–3. Unless otherwise noted, estimated compliance costs, cost savings, and revenue opportunities are based on information provided by fractional aircraft ownership program experts listed in Table A–1 in the appendix. Derivation of the estimated total economic impact on all fractional aircraft ownership program entities for each principal requirement is presented in Tables A–3 through A–6 in the appendix.

The proposed regulatory requirements would impact existing fractional aircraft ownership program entities operating under either part 91, subpart K, or part 135, or both. The proposed rule also would impact new entrants. Hence, entities that operate or plan to operate in both the part 91, subpart K and part 135 arenas would be required to comply with all applicable requirements. However, while the evaluation of the proposed rule addresses part 91, subpart K requirements as distinct from part 135 requirements, the proposed rule does not require entities operating under part 135 to create separate (that is, duplicative) management and administrative systems to be in compliance under part 91, subpart K.

TABLE 4–1. Sections of Proposed Rule Having Incremental Impacts on Fractional Aircraft Ownership Program Operations

Section of Proposed Rule	Impact on Entities Operating Under	
	Part 91, Subpart K	Part 135
§ 61.57	Cost Saving	None
§ 91.509	Cost Saving	None
§ 91.519	Compliance Cost	None
§ 91.1003	Compliance Cost	None
§ 91.1015	Compliance Cost	None
§ 91.1017	Compliance Cost	None
§ 91.1019	Compliance Cost	None
§ 91.1023	Compliance Cost	None
§ 91.1027	Compliance Cost	None
§ 91.1033	Compliance Cost	None

	Impact on Entities Operating Under	
§ 91.1035	Compliance Cost	None
§ 91.1035	Compliance Cost	None
§ 91.1037	Compliance Cost	None
§ 91.1039	Compliance Cost	None
§ 91.1041	Compliance Cost	None
§ 91.1045	Compliance Cost	None
§ 91.1047	Compliance Cost	None
§ 91.1051	Compliance Cost	None
§ 91.1057	Compliance Cost	None
§ 91.1061	Compliance Cost	None
§§ 91.1063 through 91.1107	Compliance Cost	None
§ 91.1115	Compliance Cost	None
§ 135.21	None	Compliance Cost
§ 135.23	None	Compliance Cost
§ 135.145	None	Cost Saving
§ 135.167	None	Cost Saving
§ 135.225	None	Cost Saving
§ 135.247	None	Cost Saving
§ 135.251	None	Revenue Opportunity
§ 135.255	None	Revenue Opportunity
§ 135.385	None	Revenue Opportunity
§ 135.387	None	Revenue Opportunity

Source: Based on information provided by fractional aircraft ownership program experts identified in Table A–1 in the appendix. Entities operating under both part 91, subpart K and part 135 would be required to comply with applicable requirements, although they would not be required to establish and maintain duplicate management and administrative systems to achieve compliance.

TABLE 4–2. Fractional Aircraft Ownership Program Entity Compliance Costs, Cost Savings, and Revenue Opportunities (In 1999 Dollars)

Section of Proposed Rule	Quantified Impact On Entities Operating Under	
	Part 91, Subpart K	Part 135
§ 61.57: Exceptions	Cost saving of $3,000 per pilot annually	Not applicable
§ 91.509: Survival Equipment	Cost saving of $3,500 per over-water trip	Not applicable
§ 91.519: Passenger Briefing	Compliance cost of $100 per aircraft in first year and $100 for each new aircraft in subsequent years	Not applicable
§ 91.1003: Management Contract	Compliance cost of $500 per operator and $20 for each shareholder in first year of operation and $20 for each new shareholder in subsequent years of operation	Not applicable
§ 91.1015: Management Specifications	Compliance cost of $120,000 per operator in first year of operation plus $6,000 annually in subsequent years of operation	Not applicable
§ 91.1017: Amendments	Compliance cost of $150 annually per entity	Not applicable
§ 91.1019: Tests	Compliance cost is negligible — estimated to be zero	Not applicable
§ 91.1023: Manual Requirements	Compliance cost of $10,000 per entity in first year of operation only	Not applicable
§ 91.1027: Recordkeeping	Compliance cost of $5,000 per entity in first year of operation only	Not applicable
§ 91.1033: Operating Information	Compliance cost is negligible — estimated to be zero	Not applicable
§ 91.1035: Passenger Awareness	Captured in § 91.519	Not applicable
§ 91.1037: Alternate Airports	Insufficient data to estimate impact — solicit information in NPRM	Not applicable
§ 91.1039: Take-off and landing	Compliance cost is negligible — estimated to be zero	Not applicable

Section of Proposed Rule	Quantified Impact On Entities Operating Under	
	Part 91, Subpart K	Part 135
§ 91.1041: Proving Tests	Compliance cost of $9,000 for 30 percent of aircraft fleet in first year of operations and $9,000 for 30 percent of new aircraft in subsequent years of operations[a]	Not applicable
§ 91.1045: Equipment	Compliance cost of $150,000 multiplied by 30 percent of 2002 fleet in year 2002 only	Not applicable
§ 91.1047: Substance Misuse Program	Compliance cost is negligible — estimated to be zero	Not applicable
§ 91.1051: Pilot Check	Compliance cost is negligible — estimated to be zero	Not applicable
§ 91.1057: Pilot Limitations	Captured in § 91.1027	Not applicable
§ 91.1061: Flight Crews	Captured in § 91.1027	Not applicable
§§ 91.1063 through 91.1107: Training	Compliance cost of $200,000 per entity in first year of operation only	Not applicable
§ 91.1115: Equipment Lists	Compliance cost of $5,000 per entity in first year of operation only	Not applicable
§ 135.21: Manual Requirements	Not applicable	Compliance cost is negligible — estimated to be zero
§ 135.23: Manual Content	Not applicable	Insufficient data to estimate impact — solicit information in NPRM
§ 135.145: Proving Tests	Not applicable	Cost saving of $35,000 for 66 percent of current aircraft fleet; cost saving of $35,000 for 66 percent of all new aircraft
§ 135.167: Emergency Equipment	Not applicable	Cost saving of $3,500 per over-water trip
§ 135.225: Take-off and landing	Not applicable	Cost saving of $35,000 annually per entity
§ 135.247: Pilot Experience	Not applicable	Cost saving of $3,000 per pilot annually
§ 135.251: Drug Testing	Not applicable	Insufficient data to estimate impact — solicit information in NPRM
§ 135.255: Alcohol Testing	Not applicable	Insufficient data to estimate impact — solicit information in NPRM

Section of Proposed Rule	Quantified Impact On Entities Operating Under	
	Part 91, Subpart K	Part 135
§ 135.385: Destinations Airports	Not applicable	Revenue opportunity of $40,000 annually per entity
§ 135.387: Alternate Airports	Not applicable	Captured in § 135.385

Source: Information provided by fractional ownership program experts identified in Table A-1 in the Appendix.

[a]Estimated by Phaneuf Associates Incorporated based on information developed by the FAA, Office of Aviation Policy and Plans, contained in the report titled *Final Regulatory Evaluation and International Trade Impact Assessment, Commuter Operations and General Certification and Operations Requirements, Final Rule (14 CFR Parts 119,121, 125, 127, and 135)*, October 17, 1995.

§ 61.57, Exceptions, and § 135.247, Pilot Qualifications: Recent Experience

A fractional aircraft ownership program entity operating under either part 91, subpart K or part 135 would realize annual cost savings of $3,000 per pilot as a result of complying with the proposed requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations collectively would realize cost savings of approximately $149.5 million (see Tables A–5 and A–6).[2]

§ 91.509, Survival Equipment for Over-water Operations, and § 135.167, Emergency Equipment: Extended Over-water Operations

A fractional aircraft ownership program entity operating under either part 91, subpart K or part 135 would realize cost savings of approximately $3,500 per trip. Over the 15-year period from 2002 to 2016, fractional aircraft ownership operations collectively would realize cost savings of $252.6 million (see Tables A–5 and A–6).[3]

§ 91.519, Passenger Briefing, and § 91.1035, Passenger Awareness

A fractional aircraft ownership program entity operating under part 91, subpart K would incur costs of $100 for every aircraft to comply with the proposed requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership operations collectively would incur compliance costs of approximately $61,000 (see Table A–4).

§ 91.1003, Management Contract Between Owner and Program Manager

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs represented by attorney fees of $500 and mailing expenses of $20 for each shareholder to comply with the requirement of the proposed rule. Over the 15-year period from 2002 to 2016, fractional aircraft ownership operations (operating under part 91, subpart K) collectively would incur compliance costs of approximately $143,000 (see Table A–4).

§ 91.1015, Management Specifications

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $120,000 in the first year of operation and $6,000 annually in

[2] Derived by adding $89,826,000 (from Table A–5) and $59,628,000 (from Table A–6).
[3] Derived by adding $26,460,000 (from Table A–5) and $226,187,500 (from Table A–6).

subsequent years to comply with this requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations (operating under part 91, subpart K) collectively would incur compliance costs of approximately $2.1 million (see Table A–4).

§ 91.1017, Amending Program Manager's Management Specifications

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $150 annually to comply with this requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations (operating under part 91, subpart K) collectively would incur compliance costs of approximately $19,400 (see Table A–4).

§ 91.1019, Conducting Tests and Inspections

A fractional aircraft ownership program entity operating under part 91, subpart K would incur recordkeeping costs to comply with this requirement. These costs are captured in § 91.1027. Additional costs to accommodate an inspection or test would be negligible and are estimated to be zero.

§ 91.1023, Program Operating Manual Requirements

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $10,000 in the first year of operation only. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations collectively would incur compliance costs of $120,000 (see Table A–4).

§ 91.1027, Recordkeeping[4]

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $5,000 in the first year of operation only. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations collectively would incur compliance costs of $60,000 (see Table A–4).

[4] Captures recordkeeping compliance costs attributable to §§ 91.1057 and 91.1061.

§ 91.1033, Operating Information Required

A fractional aircraft ownership program entity operating under part 91, subpart K would incur negligible costs to comply with this requirement. Accordingly, these costs are estimated to be zero.

§ 91.1037, Large Transport Category Airplanes: Turbine Engine Powered: Limitations: Destination and Alternate Airports

There are insufficient data to estimate the opportunities available to fractional aircraft ownership program entities and the associated positive impact on revenues. The FAA solicits information to resolve this matter.

§ 91.1039, IFR Takeoff, Approach, and Landing Minimums

A fractional aircraft ownership program entity operating under part 91, subpart K would incur negligible costs to comply with this requirement. Accordingly, these costs are estimated to be zero.

§ 91.1041, Aircraft Proving Tests[5]

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $9,000 for proving tests per aircraft. Thirty percent of each entities existing fleet in the first year of operation and 30 percent of all new aircraft acquired in subsequent years of operation would require proving tests. (The number of new aircraft in subsequent years of operation is the difference between the subject year and the previous year.) Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations collectively would incur compliance costs of approximately $1.6 million (see Table A–4.)

§ 91.1045, Additional Equipment Requirements

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $150,000 for 30 percent of the year 2002 fleet only, as subsequent aircraft would be appropriately equipped voluntarily by the manufacturer

[5] Estimated by Phaneuf Associates Incorporated based on information developed by the Federal Aviation Administration, Office of Aviation Policy and Plans, contained in the report titled *Final Regulatory Evaluation and International Trade Impact Assessment, Commuter Operations and General Certification and Operations Requirements, Final Rule (14 CFR Parts 119,121, 125, 127, and 135)*, October 17, 1995.

consistent with regulatory requirements and evolving technology. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations (operating under part 91, subpart K) collectively would incur compliance costs of approximately $13.9 million (see Table A–4).

§ 91.1047, Drug and Alcohol Misuse Program

A fractional aircraft ownership program entity operating under part 91, subpart K would incur negligible costs to comply with this requirement. Accordingly, these costs are estimated to be zero.

§ 91.1051, Pilot Safety Background Check

A fractional aircraft ownership program entity operating under part 91, subpart K would incur negligible costs to comply with this requirement. Accordingly, these costs are estimated to be zero.

§ 91.1057, Flight, Duty, and Rest Time Requirements

A fractional aircraft ownership program entity operating under part 91, subpart K would incur recordkeeping costs to comply with this requirement. These costs are captured in the analysis of § 91.1027.

§ 91.1061, Augmented Flight Crews

A fractional aircraft ownership program entity operating under part 91, subpart K would incur recordkeeping costs to comply with this requirement. These costs are captured in the analysis of § 91.1027.[6]

§§ 91.1063 through 91.1107, Various Training

A fractional aircraft ownership program entity operating under part 91, subpart K would incur compliance costs of $200,000 in the first year of operation only. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations collectively would incur compliance costs of $2.4 million (see Table A–4).

[6] Operating costs associated with augmenting flight crews, such as salaries, training, drug and alcohol misuse program, and other administrative program costs are captured under the specific requirements addressing these areas.

§ 91.1115, Minimum Equipment Lists and Letters of Authorization

A fractional aircraft ownership program entity operating under part 91, subpart K would incur costs of $5,000 in the first year of operation only to comply with this requirement. Negligible compliance costs would be incurred in subsequent years of operation and are estimated as to be zero. Over the 15-year period from 2002 to 2016, fractional aircraft ownership operations collectively would incur compliance costs of $60,000 (see Table A–4).

§ 135.21, Operating Requirements: Commuter and On-Demand Operations: Applicability

A fractional aircraft ownership program entity operating under part 135 would incur negligible costs to comply with this requirement. Accordingly, these costs are estimated to be zero.

§ 135.23, Operating Requirements: Commuter and On-Demand Operations: Applicability

There are insufficient data to estimate the cost to a fractional aircraft ownership program entity to comply with this requirement. The FAA solicits information to resolve this matter.

§ 135.145, Aircraft Proving Tests

A fractional aircraft ownership program entity operating under part 135 would realize cost savings of $35,000 per proving test complying with this requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations (under part 135) collectively would realize cost savings of approximately $9.4 million (see Table A–6).

§ 135.225, IFR: Takeoff, Approach, and Landing

A fractional aircraft ownership program entity operating under part 135 would realize $35,000 annually in revenue as a result of this requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership program operations (operating under part 135) collectively would realize approximately $1.5 million in revenue (see Table A–6).

§ 135.251, Testing for Prohibited Drugs

The proposal would represent a narrowly defined exception and is expected to be exercised only occasionally. Accordingly, there are insufficient data to estimate the potential additions to fractional aircraft ownership program revenue that may result from this section of the proposed rule. The FAA solicits information to resolve this matter.

§ 135.255, Testing for Alcohol

The proposal would represent a narrowly defined exception and is expected to be exercised only occasionally. Accordingly, there are insufficient data to estimate the potential additions to fractional aircraft ownership program revenue that may result from this section of the proposed rule. The FAA solicits information to resolve this matter.

§ 135.385, Large Category Airplanes: Turbine Engine Powered: Landing Limitations: Destination Airports, and § 135.387, Large Category Airplanes: Turbine Engine Powered: Landing Limitations: Alternate Airports

A fractional aircraft ownership program entity operating under part 135 would realize $40,000 annually in increased revenues as a result of this requirement. Over the 15-year period from 2002 to 2016, fractional aircraft ownership operations collectively would realize approximately $1.7 million in revenue (see Table A–6).

TABLE 4–3. Summary of Total Incremental Impact on Fractional Aircraft Ownership Program Operations to Comply with the Principal Revisions to Parts 61, 91, and 135 of the Proposed Rule

(In 1999 Dollars)

Impact	Entities Operating Under	
	Part 91, Subpart K	Part 135
Compliance Costs	$20,514,870	$0
Cost Savings	$116,286,000	$296,676,000
Revenue Opportunities	$0	$1,720,000

4.3 Impact of the Proposed Rule on the Federal Aviation Administration

The current FAA workforce would be sufficient to perform the monitoring and surveillance activities associated with administering the requirements of the proposed rule. However, it would be necessary for the FAA to develop a training course and associated instructional materials to educate its inspectors and supervisors in their

responsibilities to administer the proposed rule. Accordingly, the FAA estimates that it would incur $700,000 in the first year to train its workforce appropriately, and would incur $50,000 in each subsequent year for refresher training. Additionally, the FAA would incur $653,000 in the first year only to prepare and implement management specifications for the requirements contained in the proposed rule. Over the 15-year period from

2002 to 2016, the FAA would incur costs of approximately $2.1 million to administer the requirement of the proposed rule.[7] These costs are summarized in Table 4–4.

TABLE 4–4. Incremental Cost to the Federal Aviation Administration to Administer the Principal Revisions to Parts 61, 91 and 135 of the Proposed Rule (In 1999 Dollars)

Activity	First Year Costs[a] (2002 Only)	Annual Costs[b] (2003-2016)
Training of Inspectors and Supervisors	$700,000	$50,000
Preparation and Implementation of Management Specifications	$653,000	$0
Total	$1,353,000	$700,000[c]

[a]Extracted from *Fractional Aircraft Ownership Implementation Plan* (Draft), FAA, August 8, 2000.
[b]Estimated by Phaneuf Associates Incorporated.
[c]Derived as follows: $50,000 x 14 years = $700,000.

4.4 Summary of Cost Impacts of the Proposed Rule

The total costs of the proposed rule are approximately $22.6 million (undiscounted 1999 dollars). Fractional aircraft ownership program entities would incur approximately 91 percent of these costs, or approximately $20.5 million to comply with the requirements contained in the proposed rule; only entities operating under part 91, subpart K would incur compliance costs. The FAA would incur approximately 9 percent of the total costs, or approximately $2.1 million (undiscounted 1999 dollars) to administer the proposed rule. Fractional aircraft ownership program entities would realize approximately $413 million in cost savings (entities operating under part 91, subpart K would realize $116.3 million; entities operating under part 135 would realize $296.7 million) and

[7] Derived from Table 4–4 as follows: $1,353,000 + $700,000 = $2,053,000.

$1.7 million in potential additional revenue (only for entities operating under part 135). These economic impacts are summarized in Table 4–5.

TABLE 4–5. Summary of Economic Impacts
(In 1999 Dollars)

Category	Undiscounted	Discounted[a]
Fractional Aircraft Ownership Program Operations Compliance Costs Entities Operating Under		
Part 91, subpart K:	$20,514,870	$17,756,346
Part 135:	$0	$0
Total	$20,514,870	$17,756,346
FAA Administrative Costs	$2,053,000	$1,673,153
Total Costs	**$22,567,870**	**$19,429,499**
Potential Costs Savings to Fractional Aircraft Ownership Program Entities Operating Under		
Part 91, subpart K:	$116,286,000	$66,389,038
Part 135:	$296,676,000	$171,104,030
Total	$412,962,000	$237,493,068
Potential Revenue Opportunities to Fractional Aircraft Ownership Program Entities Operating Under		
Part 91, subpart K:	$0	$0
Part 135:	$1,720,000	$975,551
Total	$1,720,000	$975,551

[a] Discounted at 7 percent over a 15-year period from 2002 to 2016.

4.5 Benefits[8]

Most fractional aircraft ownership program operations today are conducted in accordance with industry best practices that exceed part 91 requirements. The FAA believes that the proposed standards of subpart K are necessary to assure the continued safety of operations for a fairly new and rapidly growing segment of aviation by placing regulatory limits on operations that qualify as "fractional aircraft ownership program", and by clearly delineating the safety responsibilities of fractional owners and fractional ownership program managers.

[8] Prepared by Edward O'Connor, Office of Aviation Policy and Plans, FAA (APO–310).

Table 4–6 provides an estimate of the safety of fractional aircraft ownership operations compared to other classes of operators as presented by the President of the National Business Aviation Association (NBAA) based on National Transportation Safety Board (NTSB) and FAA incident and accident data for the years 1987 through 1998. The accident rate indicates a high level of safety for the operations of all corporate part 91 operations but particularly for the operations of part 91 fractional program business jets. While the results are deemed to be representative, they may not be predictive of future operations for several reasons. First, there were very few fractional aircraft, particularly in the earlier years of this analysis, to make the findings conclusive. In addition, the hours flown by the part 91 operators are derived from the FAA's General Aviation and Air Taxi Activity Survey and are subject to the variability caused by traditional sampling error and by other errors. Thus, the accident rate "per 100,000 flight hours" is less certain than for part 121 air carriers and to a lesser degree than for part 135 air carriers who are required to report flight hours. Because fractional aircraft operate under part 91, they are not separately classified for statistical purposes or accident reports; thus, determining whether an incident is a fractional operation is judgmental. Research conducted for the NBAA indicated that there were three accidents or incidents involving business jets operated by fractional organizations between 1987 and 1998, which are reflected in Table 4–6. Furthermore, since 1998 there have been three accidents involving business jets operated by fractional aircraft ownership program organizations, which also would influence the accident rate.

TABLE 4–6. Accidents per 100,000 Flight Hours, 1987–1998

Section of Proposed Rule	Accident Rate[a]
Part 91 — Fractional Business Jets	0.174
Part 91 — Corporate/Professionally-flown Business Jets	0.188
Part 121 — Scheduled Air Carriers	0.229
Part 91 — Corporate/Professionally-flown Aircraft (all aircraft)	0.241
Part 121 — Non-Scheduled Air Carriers	0.423
Part 135 — Scheduled Commuters	0.925
Part 135 — On-Demand Jet Charter	1.960

Source: Presentation by Jack Olcott, NBAA President, February 23, 2000.

[a]Calculated as the number of accidents per 100,000 flight hours.

Table 4–7 provides a list of all known business jets accidents and incidents operated in fractional aircraft ownership programs through July 2000. It does not include data for other types of aircraft that may be operated by some fractional aircraft ownership programs. It indicates an excellent record of no fatalities or injuries.

TABLE 4–7. Fractional Program Business Jets Accidents and Incidents, 1990–2000

Date	Aircraft	Operator	Fatalities/ Injuries	Damage
November 29, 1990	Cessna 550	Net Jets	0/0	Substantial
March 11, 1993	Cessna 550	Net Jets	0/0	Minor
June 23, 1998	Learjet 60	Flex Jet	0/0	Minor
January 22, 1999	Cessna 650	Net Jets	0/0	Substantial
July 1, 1999[a]	Learjet 60	Flex Jet	0/0	Substantial
March 12, 2000 [a]	Learjet 60	Flex Jet	0/0	Substantial

Sources: NBAA and NTSB.

[a]Preliminary report.

Many of the proposed requirements would impose significant new standards upon all current and future fractional aircraft owners and fractional aircraft ownership program managers. The FAA believes these standards are necessary in the public interest to maintain the level of safety for fractional aircraft ownership program operations. While the proposed new standards would impose some costs on new fractional aircraft ownership program entities and eligible fractional ownership program managers operating under proposed part 91, subpart K, the proposed new standards would also provide new and existing fractional ownership entities and program managers operating under part 91, subpart K with significant potential costs savings and would also provide fractional ownership program managers who also conduct operations under part 135 with significant potential costs savings and some potential revenue opportunities as summarized in Table 4-5.

4.6 Summary of Incremental Costs and Safety Benefits

Table 4–8 summarizes the incremental costs and benefits attributable to the proposed regulatory requirements.

TABLE 4–8. Summary of Costs and Benefits
(In 1999 Dollars)

Category	Undiscounted	Discounted[a]
Fractional Aircraft Ownership Program Operations Compliance Costs for Entities Operating Under		
Part 91, Subpart K:	$20,514,870	$17,756,346
Part 135:	$0	$0
Total	$20,514,870	$17,756,346
FAA Administrative Costs	$2,053,000	$1,673,153
Total Costs	**$22,567,870**	**$19,429,499**
Potential Costs Savings to Fractional Aircraft Ownership Program Entities Operating Under		
Part 91, Subpart K:	$116,275,500	$66,389,038
Part 135:	$296,676,000	$171,104,030
Total	$412,951,500	$237,493,068
Potential Revenue Opportunities to Fractional Aircraft Ownership Program Entities Operating Under		
Part 91, Subpart K:	$0	$0
Part 135:	$1,720,000	$975,551
Total	$1,720,000	$975,551
Safety Benefits	Enhanced Safety	Enhanced Safety

[a] Discounted at 7 percent over a 15-year period from 2002 to 2016.

5.0 CONCLUSION

Based on the assumptions and data used herein, the proposed rule would impose incremental costs on the fractional aircraft ownership program operators and the FAA to respectively comply with and administer its requirements. The general public would benefit from enhanced safety attributable to institutionalizing existing "best practices" in the form of regulatory requirements. The FAA invites comments on the validity of all data, assumptions, and assertions, and any related potential impacts.

6.0 INITIAL REGULATORY FLEXIBILITY DETERMINATION

The Regulatory Flexibility Act of 1980 (Act) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the

business, organization, and government jurisdictions subject to regulation." To achieve that principle, the Act requires agencies to solicit and consider flexible regulatory proposals and to explain the rational for their actions. The Act covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605 (b) of the 1980 Act provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The Small Business Administration has defined small business establishments relating to fractional aircraft ownership program operators as entities comprising fewer than 1,000 employees. The FAA has determined that the proposed rule would potentially impact 12 small businesses and, for the purposes of this analysis, has assumed all these firms would operate under subpart K of part 91 thus imposing on an entity average compliance costs of approximately $1.7 million over the 15-year period (in 1999 dollars).[9] The annualized compliance cost to each small business would be approximately $157,000 (in 1999 dollars) which the current operators have stated would be voluntarily incurred.[10] Furthermore, 6 of these 12 entities would be new entrants. The FAA has determined that the proposed rule would potentially impose on each new (small business) entrant a compliance cost of approximately $655,100 over a 15-year period

[9] Calculated as $20,514,870 ÷ 12 = $1,709,572.

[10] Calculated by multiplying the discounted total compliance cost estimated for all fractional aircraft ownership program entities by the capital recovery factor for a 15-year period at 7 percent and dividing by the number of entities as follows: $17,756,346 x 0.106122223 ÷ 12 = $157,029. Information found in *Economic Analysis of Investment and Regulatory Decisions—Revised Guide*, FAA, January 1998, pp. 5–21 and Table B–4.

(in 1999 dollars). The annualized compliance cost to a new entrant would be approximately $69,500 (in 1999 dollars).[11] The FAA does not have information on the revenues of these small entrants but based on information about one of the current operators, the FAA estimates that a program aircraft generates approximately $4.6 million in revenues. If a new entrant has two aircraft, the cost that this proposed rule would impose on it is less than one percent of the approximate revenues generated by those two aircraft. The FAA therefore believes these costs would not have a significant impact on small entrants. Hence, the FAA has determined that the estimated compliance costs expected to be incurred by existing fractional aircraft ownership programs and new entrants over the 15-year period would be marginal. Therefore, the FAA certifies that the proposed rule would not have a significant economic impact on a substantial number of small entities. The FAA invites comments on the validity of all data, assumptions, and assertions, and any related potential impacts, particularly on small entrants..

7.0 INTERNATIONAL TRADE IMPACT ASSESSMENT

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. In addition, consistent with the Administration's belief in the general superiority and desirability of free trade, it is the policy of the Administration to remove or diminish to the extent feasible, barriers to international trade, including both barriers affecting the export of American goods and services to foreign countries and barriers affecting the import of foreign goods and services into the United States.

In accordance with the above statute and policy, the FAA has assessed the potential effect of this proposed rule and has determined that it would impose the same costs on domestic entities and on international entities and thus has a neutral trade impact.

[11] See Table A–11 in the appendix for calculations.

8.0 UNFUNDED MANDATES REFORM ACT ASSESSMENT

The Unfunded Mandates Reform Act of 1995 (the Act), enacted as Public Law 104–4 on March 22, 1995, is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments.

Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final rule that may result in a $100 million or more expenditure (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a “significant regulatory action.”

This proposed rule does not contain such a mandate. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.

APPENDIX A: SUPPORTING DATA AND CALCULATIONS

A.1 Principal Interviewees

Table A–1 identifies the key individuals providing information to performing the regulatory evaluation of the proposed rule. Table A–2 presents additional principal sources of general information.

TABLE A–1. Interviewees Providing Key Technical Information

Interviewee	Affiliation	Specific Areas Providing Technical Assistance and Related Information
Dave Almy	National Business Aviation Association 1200 Eighteenth Street NW., Suite 400 Washington, DC 20036-2506 202-783-9000	• Compliance costs and cost savings • Market profile
Gary Arber	Alpha Flying, Inc. 106 Access Road Norwood, Massachusetts 02062 781-551-8245	• Compliance costs and cost savings • Market profile
Steve Bishop	Executive Jet, Inc, 581 Main Street Woodbridge, New Jersey 07095 732 326-3700	• Compliance costs and cost savings • Market profile
Doug Carr	National Business Aviation Association 1200 Eighteenth Street NW., Suite 400 Washington, DC 20036-2506 202-783-9000	• Compliance costs and cost savings • Market profile
Dave Catey	Federal Aviation Administration Flight Standards Service	• Government administration costs • Market profile
Andy Cebula	The National Air Transportation Association 4226 King Street Alexandria, Virginia 22302 800-808-6282	• Compliance costs and cost savings • Market profile
Joseph D. Corrao	Helicopter Association International 1635 Prince Street Alexandria, Virginia 22314-2898 703-683-4646	• Compliance costs and cost savings • Market profile
Michael S. Knaley	Bombardier Aerospace 14651 Dallas Parkway, Suite 600 Dallas, Texas 75240 972-720-2655	• Compliance costs and cost savings • Market profile
Ed O'Connor	Federal Aviation Administration Office of Aviation Policy and Plans	• Government administration costs • Market profile

Interviewee	Affiliation	Specific Areas Providing Technical Assistance and Related Information
Kathy Perfetti	Federal Aviation Administration Flight Standards Service	• Government administration costs • Market profile
Rick Smedberg	Alpha Flying, Inc. 106 Access Road Norwood, Massachusetts 02062 781-551-8245	• Compliance costs and cost savings • Market profile
Tom Smith	Federal Aviation Administration Office of Aviation Policy and Plans	• Government administration costs

TABLE A–2. Other Principal Sources of General Information

Source	General Information Provided
Associated Aircraft Group, Inc.	Market profile
Aviation Charter Services	Market profile
Chantilly Air	Market profile
Daimler Chrysler Aerospace of North America, Inc.	Market profile
Flight Star Corporation	Market profile
Gulfstream Aerospace Corporation	Market profile
Jet Charter, Inc.	Market profile
Marc Fruchter Aviation	Market profile
TAG StarShares	Market profile
Rolls Royce	Forecast information

A.2 Fractional Aircraft Ownership Program Compliance Costs, Cost Savings, and Revenue Opportunities

Table A–3 presents the estimated number of fractional aircraft ownership program entities, shareholders, aircraft, pilots, over-water trips, and total personnel over the 15-year period from 2002 through 2016. Table A–4 presents the calculations for the sections of the proposed rule creating compliance costs for fractional aircraft ownership program entities operating under part 91, subpart K. Table A–5 presents the calculations for the sections of the proposed rule creating cost savings for fractional aircraft ownership program entities operating under part 91, subpart K. Table A–6 presents the calculations for the sections of the proposed rule creating cost savings for fractional aircraft ownership program entities operating under part 135. Table A–7 presents the incremental cost stream that would be incurred, and cost saving and revenue streams that

would be realized by fractional aircraft ownership programs as directly attributable to the proposed rule over the 15-year period based on the projected fractional aircraft ownership program population. Similar information is displayed for fractional aircraft ownership programs operating under part 91, subpart K and part 135 in Tables A–8 and A–9, respectively.

TABLE A–3. Distribution of Expected Number of Fractional Aircraft Ownership Program Operating Entities, Shareholders, Aircraft, Pilots, and Over-Water Trips Between Entities Operating Under Part 91, Subpart K and Part 135

Year	Entities[a]		Shareholders[a]	Aircraft		Pilots[b]		Over-Water Trips		Total Personnel
	Part 91	Part 135	Part 91 Only	Part 91	Part 135	Part 91	Part 135	Part 91	Part 135	Part 91 Only[c]
2002	6	2	3,446	308	205	1,386	923	350	3,000	2,341
2003	6	2	3,614	323	215	1,454	968	367	3,146	2,455
2004	7	2	3,793	339	226	1,526	1,017	385	3,307	2,576
2005	7	2	3,983	356	237	1,602	1,067	405	3,468	2,706
2006	7	2	4,184	374	249	1,683	1,121	425	3,644	2,842
2007	8	3	4,397	393	261	1,769	1,175	447	3,820	2,987
2008	8	3	4,621	413	274	1,859	1,233	469	4,010	3,139
2009	8	3	4,856	434	288	1,953	1,296	493	4,215	3,298
2010	9	3	5,102	456	302	2,052	1,359	518	4,420	3,466
2011	9	3	5,359	479	317	2,156	1,427	544	4,639	3,640
2012	10	3	5,628	503	333	2,264	1,499	572	4,873	3,823
2013	10	3	5,907	528	350	2,376	1,575	600	5,122	4,013
2014	11	4	6,198	554	368	2,493	1,656	630	5,385	4,210
2015	11	4	6,512	582	386	2,619	1,737	661	5,649	4,423
2016	12	4	6,836	611	405	2,750	1,823	694	5,927	4,644

Source: Developed by Phaneuf Associates Incorporated based on information provided by fractional aircraft ownership program experts listed in Table A–1.

[a]Assumed to be proportional to the number of aircraft.

[b]Derived as follows: 4.5 x number of aircraft = total number of pilots.

[c]Derived as follows: 7.6 x number of aircraft = total number of personnel (including pilots).

TABLE A–4. Fractional Aircraft Ownership Program Compliance Costs for Entities Operating Under Part 91, Subpart K

(In 1999 Dollars)

Year	Sections of Proposed Rule Creating Compliance Costs					
	§ 91.519[a]	§ 91.1003[b]	§ 91.1015[c]	§ 91.1017[d]	§ 91.1023[e]	§ 91.1027[f]
2002	$30,800	$71,920	$720,000	$900	$60,000	$30,000
2003	$1,500	$3,360	$36,000	$900	$0	$0
2004	$1,600	$4,080	$156,000	$1,050	$10,000	$5,000
2005	$1,700	$3,800	$42,000	$1,050	$0	$0
2006	$1,800	$4,020	$42,000	$1,050	$0	$0
2007	$1,900	$4,760	$162,000	$1,200	$10,000	$5,000
2008	$2,000	$4,480	$48,000	$1,200	$0	$0
2009	$2,100	$4,700	$48,000	$1,200	$0	$0
2010	$2,200	$5,420	$168,000	$1,350	$10,000	$5,000
2011	$2,300	$5,140	$54,000	$1,350	$0	$0
2012	$2,400	$5,880	$174,000	$1,500	$10,000	$5,000
2013	$2,500	$5,580	$60,000	$1,500	$0	$0
2014	$2,600	$6,320	$180,000	$1,650	$10,000	$5,000
2015	$2,800	$6,280	$66,000	$1,650	$0	$0
2016	$2,900	$6,980	$186,000	$1,800	$10,000	$5,000
Total	$61,100	$142,720	$2,142,000	$19,350	$120,000	$60,000

[a]Derived by multiplying the number of aircraft from Table A–3 times $100.

[b]Derived by adding $500 for each operator to $20 times the number of shareholders in the initial year of operation from Table A–3; costs in subsequent years of operation are derived by multiplying the number of new shareholders times $20.

[c]Derived by multiplying the number of entities from Table A–3 times $120,000 in the first year of operation plus $6,000 in each subsequent year of operation.

[d]Derived by multiplying the number of entities from Table A–3 times $150 in every year of operation.

[e]Derived by multiplying the number of entities from Table A–3 times $10,000 in the first year of operation only.

[f]Derived by multiplying the number of entities from Table A–3 times $5,000 in the first year of operation only.

TABLE A–4. Fractional Aircraft Ownership Program Compliance Costs for Entities Operating Under Part 91, Subpart K (Continued)
(In 1999 Dollars)

Year	Sections Creating Compliance Costs			
	§ 91.1041[g]	§ 91.1045[h]	§§ 91.1063–91.1107[j]	§ 91.1115[k]
2002	$831,600	$13,860,000	$1,200,000	$30,000
2003	$40,500	$0	$0	$0
2004	$43,200	$0	$200,000	$5,000
2005	$45,900	$0	$0	$0
2006	$48,600	$0	$0	$0
2007	$51,300	$0	$200,000	$5,000
2008	$54,000	$0	$0	$0
2009	$56,700	$0	$0	$0
2010	$59,400	$0	$200,000	$5,000
2011	$62,100	$0	$0	$0
2012	$64,800	$0	$200,000	$5,000
2013	$67,500	$0	$0	$0
2014	$70,200	$0	$200,000	$5,000
2015	$75,600	$0	$0	$0
2016	$78,300	$0	$200,000	$5,000
Total	$1,649,700	$13,860,000	$2,400,000	$60,000

[g]Derived by multiplying 30 percent of the number of aircraft in the first year of operation from Table A–3 times $9,000, and multiplying 30 percent of the new aircraft in subsequent years of operation times $9,000. The number of new aircraft in subsequent years of operation is the difference between the subject year and the previous year.
[h]Derived by multiplying 30 percent of the number of aircraft in year 2002 only times $150,000.
[j]Derived by multiplying the number of entities in their first year of operation only from Table A–3 times $200,000.
[k]Derived by multiplying the number of entities in their first year of operation only from Table A–3 times $5,000.

TABLE A–5. Fractional Aircraft Ownership Program Cost Savings for Entities Operating Under Part 91, Subpart K

(In 1999 Dollars)

Year	Sections of the Proposed Rule Creating Cost Savings	
	§ 61.57[a]	§ 91.509[b]
2002	$4,158,000	$1,225,000
2003	$4,362,000	$1,284,500
2004	$4,578,000	$1,347,500
2005	$4,806,000	$1,417,500
2006	$5,049,000	$1,487,500
2007	$5,307,000	$1,564,500
2008	$5,577,000	$1,641,500
2009	$5,859,000	$1,725,500
2010	$6,156,000	$1,813,000
2011	$6,468,000	$1,904,000
2012	$6,792,000	$2,002,000
2013	$7,128,000	$2,100,000
2014	$7,479,000	$2,205,000
2015	$7,857,000	$2,313,500
2016	$8,250,000	$2,429,000
Total	$89,826,000	$26,460,000

[a]Derived by multiplying the number of pilots from Table A–3 times $3,000.
[b]Derived by multiplying the number of over-water trips Table A–3 times $3,500.

TABLE A–6. Fractional Aircraft Ownership Program Cost savings and Revenue Opportunities for Entities Operating Under Part 135

(In 1999 Dollars)

Year	Sections of the Proposed Rule Creating				
	Cost Savings				Revenue Opportunities
	§ 135.145[a]	§ 135.167[b]	§ 135.225[c]	§ 135.247[d]	§§ 135.385–135.387[e]
2002	$4,735,500	$10,500,000	$70,000	$2,769,000	$80,000
2003	$231,000	$11,011,000	$70,000	$2,904,000	$80,000
2004	$254,100	$11,574,500	$70,000	$3,051,000	$80,000
2005	$254,100	$12,138,000	$70,000	$3,201,000	$80,000
2006	$277,200	$12,754,000	$70,000	$3,363,000	$80,000
2007	$277,200	$13,370,000	$105,000	$3,525,000	$120,000
2008	$300,300	$14,035,000	$105,000	$3,699,000	$120,000
2009	$323,400	$14,752,500	$105,000	$3,888,000	$120,000
2010	$323,400	$15,470,000	$105,000	$4,077,000	$120,000
2011	$346,500	$16,236,500	$105,000	$4,281,000	$120,000
2012	$369,600	$17,055,500	$105,000	$4,497,000	$120,000
2013	$392,700	$17,927,000	$105,000	$4,725,000	$120,000
2014	$415,800	$18,847,500	$140,000	$4,968,000	$160,000
2015	$415,800	$19,771,500	$140,000	$5,211,000	$160,000
2016	$438,900	$20,744,500	$140,000	$5,469,000	$160,000
Total	$9,355,500	$226,187,500	$1,505,000	$59,628,000	$1,720,000

[a]Derived by multiplying 66 percent of the year 2002 aircraft fleet from Table A–3 times $35,000, and multiplying 66 percent of all new aircraft in subsequent years times $35,000.
[b]Derived by multiplying each over-water trip from Table A–3 times $3,500.
[c]Derived by multiplying each entity from Table A–3 times $35,000 annually.
[d]Derived by multiplying each pilot from Table A–3 times $3,000 annually.
[e]Derived by multiplying each entity from Table A–3 times $40,000 annually.

TABLE A–7. Fractional Aircraft Ownership Program Compliance Costs, Cost Savings, and Revenue Opportunities
(In 1999 Dollars)

Period	Year	Compliance Costs		Cost Savings		Revenue	
		Undiscounted	Discounted	Undiscounted	Discounted	Undiscounted	Discounted
1	2002	$16,835,220	$15,733,850	$23,457,500	$21,922,897	$80,000	$74,766
2	2003	$82,260	$71,849	$19,862,500	$17,348,677	$80,000	$69,875
3	2004	$425,930	$347,686	$20,875,100	$17,040,300	$80,000	$65,304
4	2005	$94,450	$72,055	$21,886,600	$16,697,182	$80,000	$61,032
5	2006	$97,470	$69,495	$23,000,700	$16,399,181	$80,000	$57,039
6	2007	$441,160	$293,964	$24,148,700	$16,091,298	$120,000	$79,961
7	2008	$109,680	$68,303	$25,357,800	$15,791,563	$120,000	$74,730
8	2009	$112,700	$65,592	$26,653,400	$15,512,521	$120,000	$69,841
9	2010	$456,370	$248,235	$27,944,400	$15,199,902	$120,000	$65,272
10	2011	$124,890	$63,488	$29,341,000	$14,915,477	$120,000	$61,002
11	2012	$468,580	$222,619	$30,819,600	$14,642,170	$120,000	$57,011
12	2013	$137,080	$60,865	$32,377,700	$14,376,086	$120,000	$53,281
13	2014	$480,770	$199,502	$34,055,300	$14,131,739	$160,000	$66,394
14	2015	$152,330	$59,076	$35,708,800	$13,848,488	$160,000	$62,051
15	2016	$495,980	$179,766	$37,471,400	$13,581,360	$160,000	$57,991
Total	[redacted]	$20,514,870	$17,756,346	$412,962,000	$237,498,842	$1,720,000	$975,551

Note: Discounted at 7 percent per annum.

TABLE A–8. Fractional Aircraft Ownership Program Compliance Costs, Cost Savings, and Revenue Opportunities for Entities Operating Under Part 91, Subpart K

(In 1999 Dollars)

Period	Year	Compliance Costs		Cost Savings		Revenue	
		Undiscounted	Discounted	Undiscounted	Discounted	Undiscounted	Discounted
1	2002	$16,835,220	$15,733,850	5,383,000	$5,030,841	$0	$0
2	2003	82,260	71,849	5,646,500	$4,931,872	$0	$0
3	2004	425,930	347,686	5,925,500	$4,836,973	$0	$0
4	2005	94,450	72,055	6,223,500	$4,747,878	$0	$0
5	2006	97,470	69,495	6,536,500	$4,660,434	$0	$0
6	2007	441,160	293,964	6,871,500	$4,578,771	$0	$0
7	2008	109,680	68,303	7,218,500	$4,495,319	$0	$0
8	2009	112,700	65,592	7,584,500	$4,414,248	$0	$0
9	2010	456,370	248,235	7,969,000	$4,334,608	$0	$0
10	2011	124,890	63,488	8,372,000	$4,255,900	$0	$0
11	2012	468,580	222,619	8,794,000	$4,177,966	$0	$0
12	2013	137,080	60,865	9,228,000	$4,097,342	$0	$0
13	2014	480,770	199,502	9,684,000	$4,018,516	$0	$0
14	2015	152,330	59,076	10,170,500	$3,944,295	$0	$0
15	2016	495,980	179,766	10,679,000	$3,870,561	$0	$0
Total		$20,514,870	$17,756,346	116,286,000	66,395,525	$0	$0

Note: Discounted at 7 percent per annum.

TABLE A–9. Fractional Aircraft Ownership Program Compliance Costs, Cost Savings, and Revenue Opportunities for Entities Operating Under Part 135

(In 1999 Dollars)

Period	Year	Compliance Costs		Cost Savings		Revenue	
		Undiscounted	Discounted	Undiscounted	Discounted	Undiscounted	Discounted
1	2002	$0	$0	$18,074,500	$16,892,056	$80,000	$74,766
2	2003	$0	$0	$14,216,000	$12,416,805	$80,000	$69,875
3	2004	$0	$0	$14,949,600	$12,203,327	$80,000	$65,304
4	2005	$0	$0	$15,663,100	$11,949,304	$80,000	$61,032
5	2006	$0	$0	$16,464,200	$11,738,747	$80,000	$57,039
6	2007	$0	$0	$17,277,200	$11,512,528	$120,000	$79,961
7	2008	$0	$0	$18,139,300	$11,296,244	$120,000	$74,730
8	2009	$0	$0	$19,068,900	$11,098,273	$120,000	$69,841
9	2010	$0	$0	$19,975,400	$10,865,294	$120,000	$65,272
10	2011	$0	$0	$20,969,000	$10,659,576	$120,000	$61,002
11	2012	$0	$0	$22,027,100	$10,464,917	$120,000	$57,011
12	2013	$0	$0	$23,149,700	$10,278,744	$120,000	$53,281
13	2014	$0	$0	$24,371,300	$10,113,223	$160,000	$66,394
14	2015	$0	$0	$25,538,300	$9,904,193	$160,000	$62,051
15	2016	$0	$0	$26,792,400	$9,710,799	$160,000	$57,991
Total	[redacted]	$0	$0	$296,676,000	171,104,030	$1,720,000	975,551

Note: Discounted at 7 percent per annum.

A.3 Federal Aviation Administration Costs

Table A–10 resents the costs to the FAA to administer the principal requirements of the proposed rule.

TABLE A–10. Incremental Costs to the Federal Aviation Administration to Administer Parts 61, 91, and 135 of the Proposed Rule
(In 1999 Dollars)

Period	Year	Discount Factor[a]	Undiscounted	Discounted
1	2002	1.0700	$1,353,000	$1,264,486
2	2003	1.1449	$50,000	$43,672
3	2004	1.2250	$50,000	$40,815
4	2005	1.3108	$50,000	$38,145
5	2006	1.4026	$50,000	$35,649
6	2007	1.5007	$50,000	$33,317
7	2008	1.6058	$50,000	$31,137
8	2009	1.7182	$50,000	$29,100
9	2010	1.8385	$50,000	$27,197
10	2011	1.9672	$50,000	$25,417
11	2012	2.1049	$50,000	$23,755
12	2013	2.2522	$50,000	$22,201
13	2014	2.4098	$50,000	$20,748
14	2015	2.5785	$50,000	$19,391
15	2016	2.7590	$50,000	$18,122
Total			$2,053,000	$1,673,153

[a]Discounted at 7 percent per annum.

A.4 Regulatory Flexibility Determination

Calculations used to estimate the impact on new entrants are summarized in Table A–11.

TABLE A–11. Compliance Cost Impact of Proposed Rule on a New Entrant
(In 1999 Dollars)

Section	Calculation	Cost
91.519	2 x $100	$200
91.1003	$500 +(24 x $20)	$980
91.1015	$120,000 x 1	$120,000
91.1017	$150 x 1	$150
91.1023	$10,000 x 1	$10,000
91.1027	$5,000 x 1	$5,000
91.1041	$9,000 x (2 x .3)	$5,400
91.1045	$150,000 x 2	$300,000
91.1107	$200,000 x 1	$200,000
91.1115	$5,000 x 1	$5,000
Total Initial Cost		$646,730
Annual Costs Years 2-15	$6,170 x 14	$86,380
Total Costs		$733,110
Present Cost	@ 7% for 15 years	$655,114
Annualized Cost		$69,522

Note: Assumes that a new entrant has two aircraft and 12 shareholders per aircraft.

LIST OF REFERENCES

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